CLAIM(S):

1. An apparatus in an upward flowing fluidized bed granulator or dryer with a screen positioned across the bottom of the granulator or dryer, the apparatus comprising:

a cylindrical partition with a diameter to length ratio that is greater than or equal to 1; and

a spray nozzle positioned to provide spray within the cylindrical partition to spray coating solution.

2. The apparatus in claim 1 wherein the cylindrical partition is located substantially near the bottom portion of the granulator or dryer.

3. The apparatus in claim 1 wherein the cylindrical partition is located substantially along a vertical axis of the fluidized bed granulator and is adjustable along the vertical axis.

4. The apparatus in claim 3 wherein the cylindrical partition is adjustable substantially on the vertical axis by a level control external to the granulator or dryer.

5. The apparatus in claim 1 wherein the spray nozzle is upwardly positioned below the cylindrical partition in a non-heat conducting relation to the bottom screen of product container.

6. The apparatus in claim 1 where the spray nozzle is located in the granulator or dryer substantially along a vertical axis of the fluidized bed granulator or dryer.

7. The apparatus in claim 6 wherein the spray nozzle is adjustable along the vertical axis, related to the cylinder.

8. The apparatus in claim 1 wherein an atomizing gas line is connected to the spray nozzle.

9. The apparatus in claim 1 wherein a liquid line is connected to the spray nozzle.

10. The apparatus in claim 9 where the liquid line is heated.

11. An apparatus disposed within a fluidized bed granulator or dryer with a screen positioned across the bottom of the granulator or dryer, the apparatus comprising:

a cylindrical partition positioned substantially in a bottom portion of the granulator or dryer and being adjustable along a substantially vertical axis;

a spray nozzle disposed above the bottom screen and positioned within the granulator or dryer in a non-heat conducting manner in relation to the screen to provide a spray within the cylindrical partition;

an atomizing gas line attached to the spray nozzle; and

a liquid line attached to the spray nozzle.

12. The apparatus in claim 11 wherein the liquid line is heated.

13. A process for coating particles comprising:

providing an insert within an upward flowing fluid bed dryer or granulator with a screen across the bottom of the dryer or granulator, the insert comprising a vertically adjustable cylindrical partition located substantially on a vertical axis of the granulator or dryer, a spray nozzle with a heated liquid line and an atomizing gas line connected thereto which is positioned such that a liquid is sprayed within the adjustable cylindrical partition, the spray nozzle being positioned in a non-heat conducting relation to the bottom screen, the spray nozzle being located substantially on the vertical axis;

loading the dryer with a bed of particles;

adjusting the cylindrical partition such that the position of the top of the cylindrical partition is above the bed of particles and product container can be removed out;

adjusting the spray nozzle such that a spray zone is created within the cylindrical partition;

providing a gas to fluidize the bed of particles through the bottom screen;

providing an atomizing gas which is processed through the spray nozzle;

providing a liquid which is atomized through the spray nozzle;

contacting the particles with the liquid from the spray nozzle within the cylindrical partition and coating zone;

drying the particles in the reconditioning zone; and

circulating the particles from the fluidized bed up through the cylindrical partition, down through the drying zone and back into the fluidized bed until a selected amount of liquid is coated onto the particles.

14. The process of claim 13 wherein the liquid is provided for coating particles.

15. The process of claim 13 wherein the liquid is provided to agglomerate the particles.

16. The process of claim 14 wherein the liquid for coating the particles includes a liquid fat or hot melt.

17. The process of claim 13 wherein the cylindrical partition has a diameter to length ratio greater than or equal to 1.

18. The process of claim 13 wherein the spray nozzle is adjustable along the vertical axis such that the top of the nozzle is positionable within the cylindrical partition or below the bottom edge of the cylindrical partition.

19. The process of claim 13 wherein an inlet air temperature, a product temperature, a spray liquid temperature, a spray nozzle temperature, an atomizing air temperature, a spray liquid line temperature, a coating zone temperature, a fluidizing gas flow, and atomizing gas pressure are monitored.

20. An apparatus within an upward flowing fluidized bed dryer or granulator with a screen across the bottom of the dryer or granulator, the apparatus comprising:

a cylindrical partition with a diameter-to-length ratio greater than or equal to 1;

a spray nozzle positioned in a non-heat conducting relation to the bottom screen, the spray nozzle being adjustable along a vertical axis of the dryer or granulator to provide a liquid spray within the cylindrical partition;

an atomizing gas line connected to the spray nozzle; and

a liquid line connected to the spray nozzle.

21. The apparatus in claim 20 wherein the spray nozzle is located substantially along a vertical axis.

22. The apparatus in claim 20 wherein the spray nozzle is adjustable along the vertical axis such that the tip of the spray nozzle is positionable within the cylindrical partition or being positioned below the cylindrical partition.

23. The apparatus of claim 20 wherein the cylindrical partition is adjustable along the vertical axis.

24. The apparatus in claim 20 wherein the cylindrical partition is substantially located along the vertical axis.

25. The apparatus in claim 20 wherein the liquid line is heated.